

Solution Brief: INFINIDAT InfiniBox™ and the Commvault® Data Platform

A COMPREHENSIVE DATA PROTECTION SOLUTION FOR PETABYTE-SCALE WORKLOADS

COMMVAULT® DATA PLATFORM

Businesses today — particularly those with large data requirements — need a flexible and scalable method for protecting their application data, one that understands applications and how to make production ready copies of their data for backup and restore, development and test, patching and modification, or any other use case deemed valuable to the organization.

They need the ability to automate the creation, cataloging, mapping, bringing online/offline, and restoring from these duplicates. In the past, all of these tasks required creating and maintaining manual scripts that understood every application in use, along with any tools necessary to accomplish each task.

The Commvault® Data Platform, in conjunction with the INFINIDAT InfiniBox™ automates each of these tasks, eliminating the need to create, test, and continuously update custom scripts. The Commvault® Data Platform is an enterprise level, integrated data protection and management solution, built from the ground up on a single platform and unified code base.

INFINIDAT INFINIBOX™

The InfiniBox™ represents a new class of hyper-storage that offers unprecedented levels of performance, reliability, scale, ease of use, and cost savings to the enterprise. It's a highly innovative, multi-patented, storage software solution that runs on a high availability hardware configuration.

InfiniBox is a Tier 0/1 performance platform that's also capable of supporting backup and archive implementations. It is available at capacities and a cost differential that extends features such as backup and archive to Tier 2/3 use cases. Paired with the Commvault® Data Platform, the combined solution is extremely compelling.



A SINGLE DATA PROTECTION SOLUTION FOR LARGE ENTERPRISE STORAGE AND MANAGEMENT

As business data continues to grow at a record pace, traditional backup and copy methodologies are not sufficient to keep data current. Leveraging snapshot technology to ensure the currency of business data is of vital importance to a company's bottom line. INFINIDAT InfiniSnap TM technology, leveraged by the Commvault $^{\odot}$ Data Platform, helps ensure that your data is more current than with any other vendor's snapshot feature.

With deep integration into INFINIDAT's high-performance storage arrays, the Commvault Data Platform will enable you to protect your data workloads across all architectures — on premises, within virtual infrastructures, and in the cloud, helping to increase your business agility, IT efficiency, and reliability. It provides the petabyte-scale market with a single, modern data protection solution that affords unmatched performance and reliability, supporting business critical applications and enabling stringent backup and recovery performance service level agreements (SLAs).

A PASSION FOR INNOVATION

The affinities between the Commvault® Data Platform and InfiniBox™ are born of a similar passion for innovation. Both have comprehensive feature sets offering synergies with each other. One example is between the Commvault IntelliSnap® and INFINIDAT InfiniSnap™ technologies.

Commvault IntelliSnap® technology is extensively integrated with the applications that run your business — from Oracle to VMware to Microsoft to many others. It understands how to snapshot data with application consistency and the ability to restore down to the table level — two essential elements in keeping your data current. It does this by leveraging the snapshot technology in the underlying storage array — the most efficient, most reliable method for protecting your data. But all storage arrays are not created equal. To provide the highest level of protection and currency to your data, the implementation of snapshots for your storage matters greatly.

InfiniSnap™ is a patented, non-locking, snapshot technology that uses timestamps to eliminate the inherent scalability and performance issues common with snapshots from other vendors. Metadata, for volumes and snapshot operations, is maintained with a highly efficient implementation of a Trie Tree — the same data structure employed by Google's search engine. The use of the Trie Tree allows for nearly limitless scalability of data operations. This means that your business can conduct snapshots for all of its data, at any frequency, with ZERO impact on the performance of the array during the snapshot and all subsequent I/O operations. INFINIDAT innovation ensures that your data, at any point in time, is always available and always current.

Because of deep integration with InfiniBox[™], Commvault is able to work on both the source and destination snaps on primary protection copies, integrated with Commvault deduplication technology. This represents a tremendous value to enterprise customers who are looking for new, more impactful opportunities for infrastructure consolidation and cost savings.

DATA PROTECTION FOR THE FUTURE

Commvault and INFINIDAT have collaborated on a verified solution that combines the features of the InfiniBox with industry-leading Commvault® software. This proven combination of technologies enables mutual customers to quickly realize the value of simple and efficient backup and recovery operations. At the end of the day, with the Commvault® Data Platform and INFINIDAT InfiniBoxTM, your organization gains a competitive advantage over your business peers and your data has the currency required to move your business forward at all times.

KEY FEATURES

COMMVAULT® DATA PLATFORM

A complete and fully-scalable data protection solution supporting all major operating systems, applications, and databases

- Commvault's Virtual Server Agent (VSA) supports all major hypervisors and platforms (including VMware, Hyper-V, Citrix, XEN, Amazon, Azure, and many others) and physical servers, as well as NAS shares, hybrid and cloud-based infrastructures, and mobile devices
- · Simplified management through an admin console
- Multiple protection methods including backup and archive, IntelliSnap® snapshot management, replication, and content indexing for eDiscovery
- Policy-based data management, transcending limitations of legacy backup products by managing data based on business needs instead of physical location

INFINIDAT INFINIBOX™

- · Performance exceeding All-Flash arrays
- Reliability at orders of magnitude better than legacy monolithic arrays
- Densities and capacities that maximize floor space and consolidation efforts
- Ease of use that significantly reduces the petabyte (PB) per full-time employee (FTE) management ratio
- Economy of scale that dramatically lowers total cost of ownership (TCO) and increases return on investment (ROI) for large-scale, data-intensive IT operations

INFINIDAT INFINISNAP™ SNAPSHOTS AT A GLANCE

Every INFINIDAT InfiniBox™ includes InfiniSnap™ capability for snapshots. InfiniSnap provides:

- Massive scalability, up to 100,000 snapshots per system
- No performance impact, regardless of snapshot frequency
- Ability to support dozens of snapshots per second with no performance impact
- Thin by default, requiring nearly zero additional capacity
- "Fast Overwrite" in-memory updates avoids unnecessary backend I/O and latency penalties common in systems requiring frequent destaging
- When destaging is required, InfiniRaid™ is employed to optimize massively parallel I/O operations across all available media capacity

BENEFITS OF INFINIDAT INFINISNAP WITH THE COMMVAULT® DATA PLATFORM

- A single, unified hardware and software solution
- Hardware and software that can be tightly integrated
- Reduced risk and improved total cost of ownership (TCO)
- Enables high-performance SLAs, for enhanced data protection and improved business outcomes

ABOUT COMMVAULT

Commvault is a leading provider of data protection, cloud, and information management solutions, helping companies worldwide activate their data to transform modern data environments, provide business insight, and drive more value.

With solutions and services delivered directly and through a worldwide network of partners and service providers, Commvault solutions comprise one of the industry's leading portfolios in data protection and recovery, cloud, virtualization, archive, file sync, and share. Commvault has earned accolades from customers and third party influencers for its innovation, technology vision, and execution, and has a stellar reputation as an independent and trusted expert. Commvault's sole focus on data management has led to its adoption by companies of all sizes, in all industries, and for solutions deployed on premises, across mobile platforms, to and from the cloud, and provided as-a-service. Commvault employs more than 2,700 highly-skilled individuals across markets worldwide, is publicly traded on NASDAQ (CVLT), and is headquartered in Tinton Falls, New Jersey in the United States. To learn more about Commvault — and how it can make your data work for you — visit commvault.com.

ABOUT INFINIDAT

Founded in 2011 by storage industry pioneer Moshe Yanai, INFINIDAT helps customers unlock the full potential of their data. INFINIDAT's software-focused architecture, an evolution and revolution in data management design over 30 years in the making, solves the conflicting requirements of bigger, faster, and less expensive storage. INFINIDAT technology simultaneously delivers sub-millisecond latency, seven nines of reliability, and hyperscale capacity with a significantly lower total cost of ownership than incumbent storage technologies. For more information, visit www.infinidat.com.

For more information, visit us at commvault.com.

© 2018 Commvault Systems, Inc. All rights reserved. Commvault, Commvault and logo, the "C hexagon" logo, Commvault Systems, Commvault OnePass, CommServe, CommCell, IntelliSnap, Commvault Edge, and Edge Drive, are trademarks or registered trademarks of Commvault Systems, Inc. All other third party brands, products, service names, trademarks, or registered service marks are the property of and used to identify the products or services of their respective owners. All specifications are subject to change without notice.













